

MEASLES UPDATE

National Immunization Program (NIP), Centers for Disease Control & Prevention Measles Activity in U.S. through Week 33 (ending Aug 16, 2003)

No. of confirmed measles cases reported to MMWR for 2003: **34**

No. of confirmed measles cases reported to MMWR Wk 23, 2002: **23**

No. of confirmed measles cases reported to NIP as of 8/22/03: **39**

Current U.S. outbreaks (outbreak=3 or more linked cases) **1**

As of Week 33, 2003, 34 confirmed measles cases had been reported to the MMWR compared to 23 cases reported by Week 23 of 2002. Three of the 34 cases in NETSS are (NYS) error records that will be deleted. The National Immunization Program (NIP) has been notified of 39 confirmed cases in 11 states during 2003. All confirmed cases (N=39) are listed by date of rash onset in a Table below. **New cases** added to the Update are in **BOLD**. Eight confirmed cases that have been reported to NIP have not been officially reported to MMWR.

Sixty-six percent of cases are import-associated (15 importations and 11 linked to an importation).

Marshall Islands: A report posted on pacnet by the Ministry of Health in the Marshall Islands is included with this Update. Since that posting, the CDC Epi-Team assisting with the outbreak reports 468 suspected cases as of August 27, 2003 with 30 hospitalizations and 2 deaths (ages 39- & 27-yrs). Decision was made to raise the age for vaccination to 40 years. Six cases have been identified on Ebeye. The large majority of cases are in Majuro.

Onsets for 4 cases in HAWAII (July 13-23) are similar to those of earlier cases in Majuro (Marshall Islands).

A common source for Hawaii and the Marshall Islands is likely. Viral sequencing for 2 Hawaii cases (onsets 7/13 & 7/23) are similar to virus received from the Marshall Islands.

GUAM has identified 3 cases in a family returning from the Marshall Islands on or around 8/22/03.

Send any questions or comments to Dr. Mark Papania, Team Leader for Measles Mumps Rubella Activity at the National Immunization Program or to Ms. Susan Redd at NIP via e-mail to: sbr1@cdc.gov; phone (404) 639-8763/8761; or fax (404) 639-8665. We appreciate knowing of any new MMR activity in your project area. For measles genotyping results, new publications, press releases etc., please visit the CDC Measles Lab website:

<http://www.cdc.gov/ncidod/dvrd/revb/measles/>

#	Proj	Age /dob	Rash onset Date	Vax hx	Spread Cases?	Reported To MMWR?	Viral Specimens Received at CDC	MEASLES CONFIRMED as of Aug 22, 03 Comments / Source Information
01	NYC	24-yr-old	1/19/03	Unk	No	No	No	Single IMPORT/Philippines Foreign visitor arrived in NYC on 1/17/03. Known exposure to measles in the Philippines.
02	AZ	4-yr-old female	1/27/03	No	No	Yes	Yes, Negative (collected 8 days after rash onset)	Single IMPORT/Thailand Maricopa Co. resident returned to U.S. on 1/23/03 after 7-wk stay in Thailand.
03	MI	25-yr-old female	1/27/03	Yes, @15 mos of age	No	Yes	No	Possible 2- case chain Source of infection unknown – common source of infection with case below is likely. Case works in medical setting (Wayne County).
04	MI	10-mo-old female	1/29/03	No	No	Yes	Yes, t. s., no results	Unknown source – possible common source of infection as above MI 25 yr old.
05	IL	11-mo-old	3/7/03	No	No	No	Yes	Single IMPORT in an 11-month-old. This U.S. born child was in India from 1/24 to 3/8/03, returning to U.S. 1 day after rash appeared. Three return flights involved over 3/7-8. Last flight was from Amsterdam to Chicago on 3/8/03 via Singapore Airlines Flight SQ36. Child went directly to MD's office then admitted to hospital.
06	PA	17 yr old male	3/21/03	Yes, 2 doses Egypt	Yes, 10	Yes	No	IMPORT from Lebanon. Source for Delaware County, PA outbreak at private boarding school (grades 7-12). He was born in Egypt; lived in Saudi Arabia and Egypt; vaccinated in Egypt 7/23/86 & 8/7/99.

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07	HI	20-mo-old	3/20/03	Unk	No	Yes	No	Import from American Samoa in Honolulu Date of arrival requested
08	HI	20-yr-old	3/24/03		No	Yes	No	Japanese tourist in Oahu (Waikiki)
09	OH	36 yr old male	3/24/03	Yes, 1 dose	Yes, his 11-mo-old child	Yes	No	This IMPORT traveled to Paris then Rome during 3/6 to 3/14. Rash onset 10 days after return to U.S. He is the source of infection for his unimmunized 11 mo-old child. See IgM+ 11-mo-old below with rash onset 4/3. Imported 2-case chain.
10	PA	13 year old male	4/2/03	No, relig exemption		Yes	Yes, D4	Private boarding school outbreak. Traceable to Import – lives in same dorm as Case 1 (import from Lebanon). Unimmunized student, religious exemption. Hospitalized 7 days.
11	OH	11-mo-old male	4/3/03	No	Unk	Yes	No	Traceable to an import. 2-case chain with imported source.
12	PA	13 year old male	4/3/03	No, relig exemption	Unk	Yes	Yes, D4 outbreak	Private boarding school outbreak. Traceable to import – lives in same dorm as Case 1 (Lebanon). Unimmunized student with religious exemption. Hospitalized 7 days.
13	PA	27 year old male dob 4/76	4/3/03	Yes, 1 dose 5/77	Unk	Yes	No	Private boarding school outbreak. Houseparent with hx of 1 dose. Vaccination history verified by his school record showing 1 dose on 4/17/77 (@ 12 mos). Traceable to import.
14	PA	17-yr-old male 'KK' dob 3/87	4/5/03	Yes, 2 doses in Egypt	Unk	Yes	Yes	Outbreak related. Traceable to imported case. This student had rec'd 2 doses of vaccine in Egypt on 11/8/92 and 12/6/97. He had not traveled to /Lebanon with the source case. No international travel.
15	PA	Teen Male	4/5/03	Yes		Yes		Outbreak related Traceable to import
16	NYS	39-yr old male (5/63)	4/9/03	Unk	No	Yes	Yes, urine	Source unknown; lives in Nassau Co. Works for an import goods co. in NYC
17	PA	18 yr old male	4/15/03	Yes		Yes		Outbreak related Delaware Co. Traceable to import.
18	PA	17 yr old male	4/15/03	Yes		Yes		Outbreak related Delaware Co. Traceable to import.
19	PA	18 yr old male	4/15/03	Yes		Yes		Outbreak related Delaware Co. Traceable to import
20	CA	22-yr-old male	4/16/03	No	No	Yes	State Lab will send to CDC	Single IIMPORT from Italy U.S. resident. Returned from Italy to San Francisco on 4/13/03
21	NYC	13 mo old male	4/18/03	No	Yes	No	Yes, D4	Outbreak related Delaware Co. PA Infected by PA student in NYC on 4/5
22	NYC	33 yr old female	4/28/03	Unk	No	No	Yes	Outbreak related Delaware Co., PA Russian immigrant who lives in same building with NYC 13 mo old w/rash 4/18/03
23	HI	49 yr old male	4/20/03	Unk	Yes, 2	Yes	No	Outbreak of 3 in Honolulu family Source unknown. Index works in airline catering
24	NC	1 yr old female	4/23/03	Unk	Unk	Yes	No	Single Import from India in Hoke County Resides in USA, sick after return pm 4/19 Following 5 week stay in India; no day-care No siblings; Lab draw 4/28; rubella negative
25	HI	9 mo old female	4/28/03	No	Unk	Yes	No	Outbreak related in Honolulu Infected by 49-year-old w/onset 4/20
26	HI	26 yr old male	5/3/03	Unk	Unk	Yes	No	Outbreak related in Honolulu Infected by 49-year-old w/onset 4/20

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27	HI	44 yr old female	5/4/03	Unk	Unk	Yes	No	Not linked to above 3-cases in Honolulu. Person works in a gift shop in tourist area.
28	HI	43 yr old female	5/13/03	Unk	Unk	Yes	No	No direct link to above 3- cases in Honolulu. Employed as a caregiver for elderly couple. Source unknown
29	NYS	39 yr old male	5/27/03	Unk	No	Yes	Yes	Tompkins County, Upstate NY U.S. resident, no source identified. Works in Ithaca, met case definition Hosp 6 days, URI, fever of 105, rash 8 days. IgM+ at state and private lab Viral specimen collected 14 days out (urine)
30	CA	75-yr-old male	5/27/03	Unk	No	No	Yes, D6	Arrived from Israel on 5/14/03 Patient DIED from complications; Genotyping: D6
31	HI	16 mo old	7/13/03	No		Yes	Yes H1	Marshallse child born in US, lives in apt In Leeward Oahu area. Part of New cluster/outbreak. No travel to Marshall Islands
32	HI	17 yr old female	7/14/03			Yes	No	Sisters living in Oahu. May be part of new cluster which began At same time as the Marshall Islands outbreak
33	HI	13 yr old female	7/15/03			Yes	No	Sisters living in Oahu May be part of new cluster
34	HI	12 mo old	7/23/03	No		Yes	Yes, H1	May be part of new cluster
35	OR	22 yr old male	8/1/03			Yes	No	Import/Foreign exchange student from Japan visiting College in Oregon. Two-case chain –see 2 nd Japanese student
36	NYC	38 year old female	8/4/03			No	Yes, D7	Import/German visitor arrived NYC 7/28/03 from Frankfurt via Milan
37	GA	12-yr-old male	8/11/03	Yes, 1dose		No	Yes, Unsuccessful	Import/Visitor from Nigeria Lithonia (DeKalb County) Hospitalized; arrived ATL 8/7/03
38	OR	21 yr old female	8/14/03			No	Yes	Import/Japan student visiting College in Oregon ; link to above Japanese Import; 2-case Chain
39	HI	10 mo old	8/16/03	No		Yes	Yes	Arrived in Honolulu from Marshalls via Continental # (Vaccinated 1 day prior)

2003 Measles Outbreaks (3 or more linked cases)						Shaded= outbreak was imported
	Proj	Location(s)	1 st & Last Rash Onsets	# Conf Cases	Age Range	Comments
1	PA & NYC	Montgomery Co., PA NYC, NY	3/21/03 – 4/28/03	11 9 PA 2 NYC	13 months to 33 years; majority (8) are teenaged students in in PA	Source is Lebanon. Outbreak setting is a private residential school in PA (8 teenagers & 1 staff) plus 2 spread cases in NYC (13 mo old exposed in drs. Office and a 33 years spread from 13 month old in apartment building). Genotype = D4
2	HI	Honolulu	4/20/03 - 5/3/03	3	49 years 9 months 26 years	Source is unknown No viral specimens collected. Three relatives. The 49-yr-old male works for airline caterers.
3	HI	Leeward Oahu	7/13, 7/14, 7/15, 7/23, 8/16	4-5	16 mo, 17y, 13y, 12 mo 10 mo	2 of 4 cases with same genotype as cases occurring in Marshall Islands One import from Marshalls with onset 8/16

Rubella – 6 cases have been reported to MMWR for 2003.

State	County	Age/sex	eventdate	Import status	Country of birth
CO	Arapahoe Co.	21 year old female	12/26/02	Indigenous	USA
HI	Honolulu Co.	14 year old male	2/01/03	Indigenous	Taiwan
HI	Hawaii Co.	32 year old male	4/26/03	Unknown	
MS	Lowndes Co.	17 year old female	2/03/03	Indigenous	USA
NJ	Passaic Co.	unknown / male	5/12/03	Unknown	
MO	Henry Co.	42 year old female	6/26/03	case to be deleted per Missouri	

Congenital Rubella Syndrome – No cases have been reported.

Mumps –Three cases of mumps were reported to MMWR during week 33. So far in 2003, 130 cases have been reported compared to 182 cases during the same period in 2002. Fifty-eight (45%) of the cases are ≤ 15 years of age. Forty-five (35%) of the cases were reported by California, and ten (8%) were reported by Hawaii. Of the 130 reported cases, 45 (35%) are unknown case status. Of the 85 cases with known case status, 57 (67%) are confirmed and 28 (33%) are probable. Of the 79 cases with known importation status, 76 (96%) are indigenous. Of the 80 cases with known race, 3 (4%) are Native American/Alaskan Native, 15 (19%) are Asian/Pacific Islander, 6 (8%) are African American, 52 (65%) are Caucasian and 4 (5%) are other. Of the 91 cases with known ethnicity, 26 (29%) are Hispanics.

MEASLES OUTBREAK on Majuro, Republic of the Marshall Islands from posted on pacnet on behalf of the Secretary of Health and Environment, Marshall Islands

As of Wednesday, August 20, 316 suspected measles cases have been reported by the Ministry of Health. Of these, 207 meet the clinical case definition of measles (rash and fever) and an initial six cases have been serologically confirmed (IgM). All cases appear to have contracted measles on the main atoll of Majuro, except for a single child who is suspected of contracting measles on the second main atoll of Ebeye. The number of measles cases reported weekly since mid-July is still increasing. The age distribution of 316 suspected measles (with known age) ranges from 4 months to 40 years with the following distribution:

Under 1 year 38 cases (13 %)

1 to 5 years 74 cases (25 %)

6 to 10 years 34 cases (11 %)

11 to 15 years 51 cases (17 %)

16 to 20 years 38 cases (13 %)

21 to 25 years 32 cases (11 %)

26 to 30 years 17 cases (6 %)

31 to 35 years 12 cases (4 %)

35 years plus 6 cases (2 %)

To contain the spread of measles the Ministry of Health imposed a complete restriction of all travel (sea and air) to the outer islands and sent vaccination teams (by chartered plane) to these islands to vaccinate the population aged 6 months to 30 years. MMR was administered to people in the target age group with no record of two valid doses of MMR. This activity has now been completed and all travel restrictions to the outer islands have been lifted. To further contain the spread of measles within the region, international travelers, 30 years and under, are required to be vaccinated with MMR before leaving the Marshall Islands, if proof of 2 previous measles containing vaccine doses cannot be provided.

Within Majuro, the immunization campaign is currently targeting people 6 months to 30 years. The start of school has been delayed a week to vaccinate all students (primary to high school). No student will be allowed to attend classes without proof of MMR immunization, either through the routine EPI or the current campaign. Central to the immunization campaign has been active social mobilization strategies that have included: involvement of traditional leaders, the church, community groups, school principals and the Chamber of Commerce, to spread information and provide support. People receiving their first dose of MMR during the campaign will be required to have a second MMR dose during a second round. Children that received their first dose of MMR before the age of 12 months will still be required to receive 2 additional doses of MMR after 12 months of age to ensure full immunity to measles. Since the start of this outbreak in mid July, over the 10,000 doses of MMR have been Immunization activities are still expected to continue for at least another week, with the second round on immunization commencing in early September.

end

